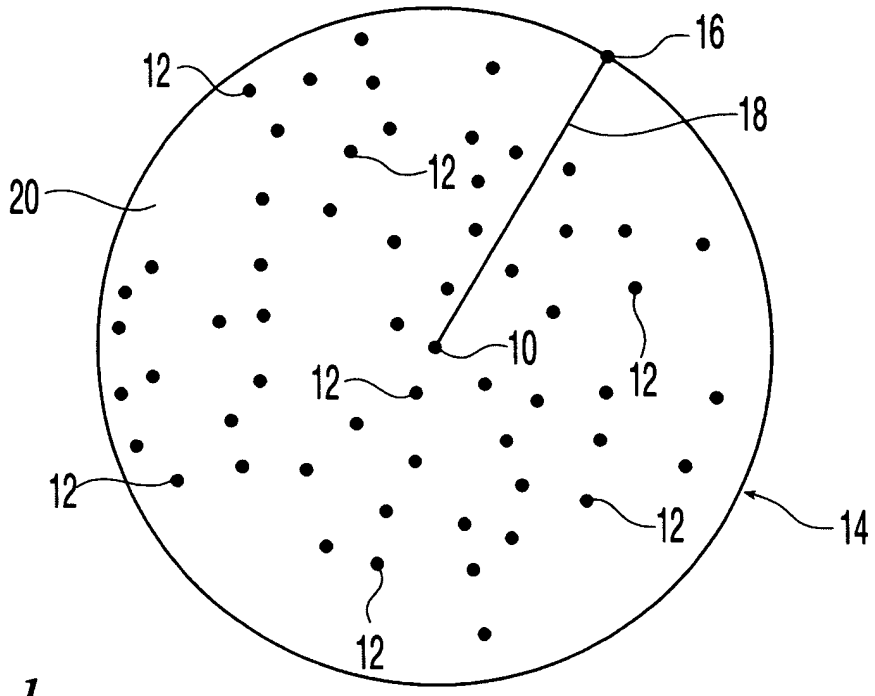
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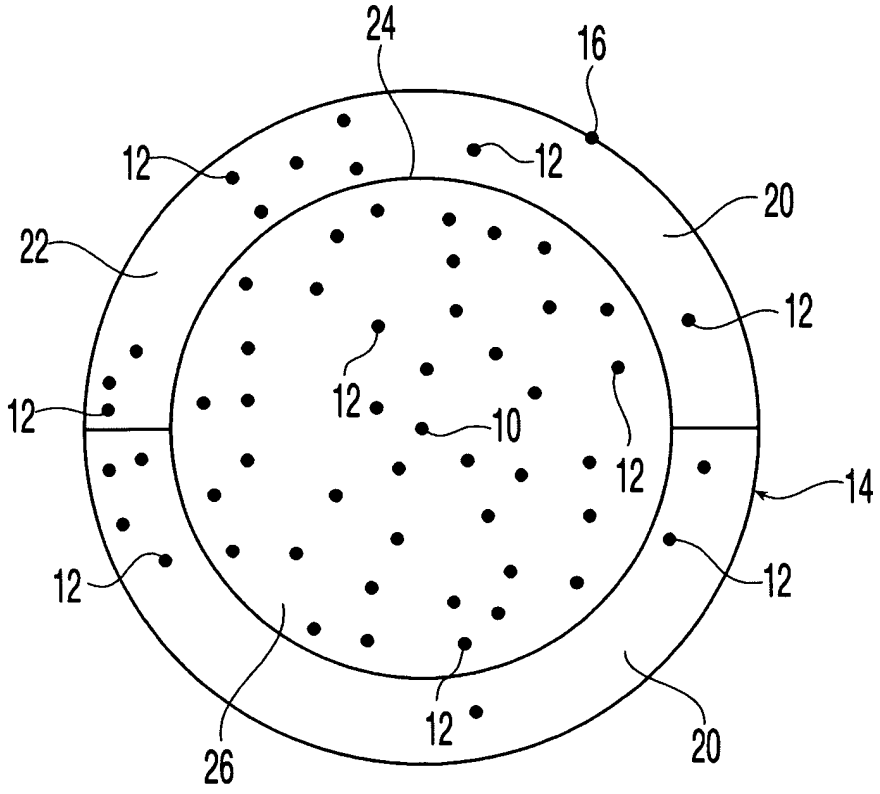
12
12
12
12
14
12

Fig. 1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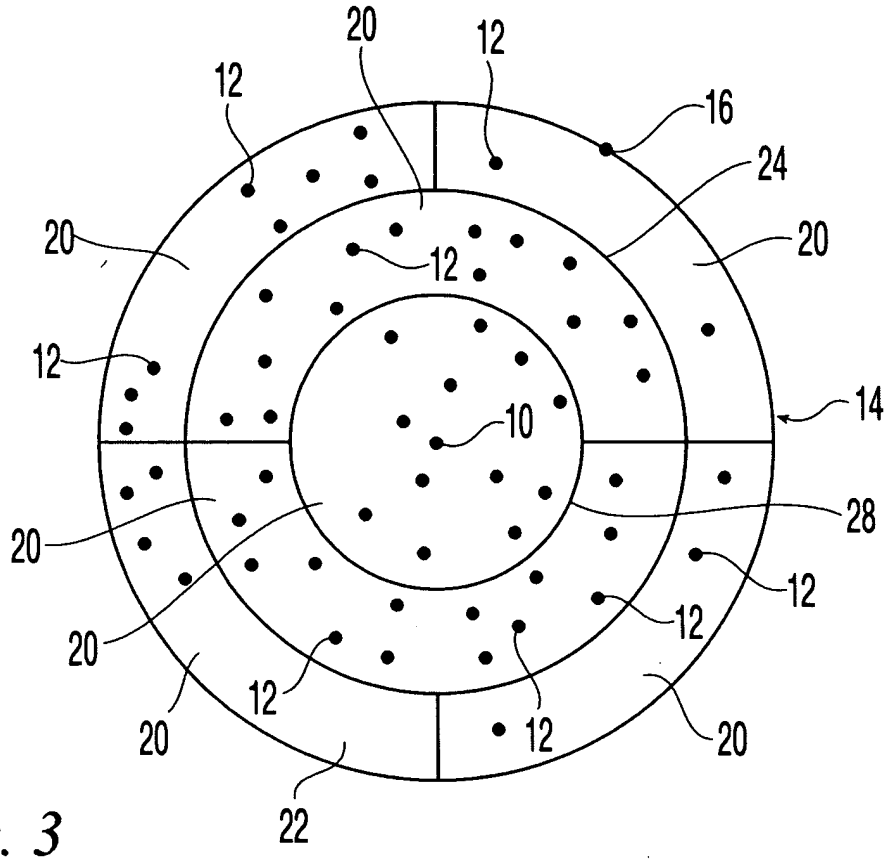
26
20

Fig. 2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22

Fig. 3

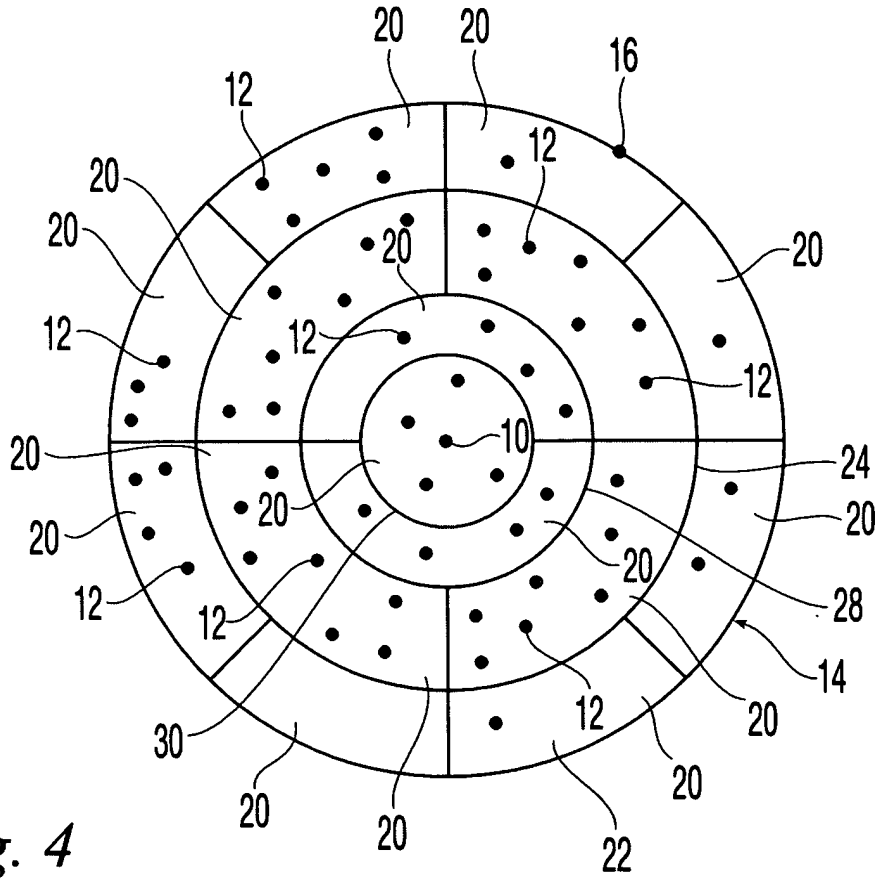
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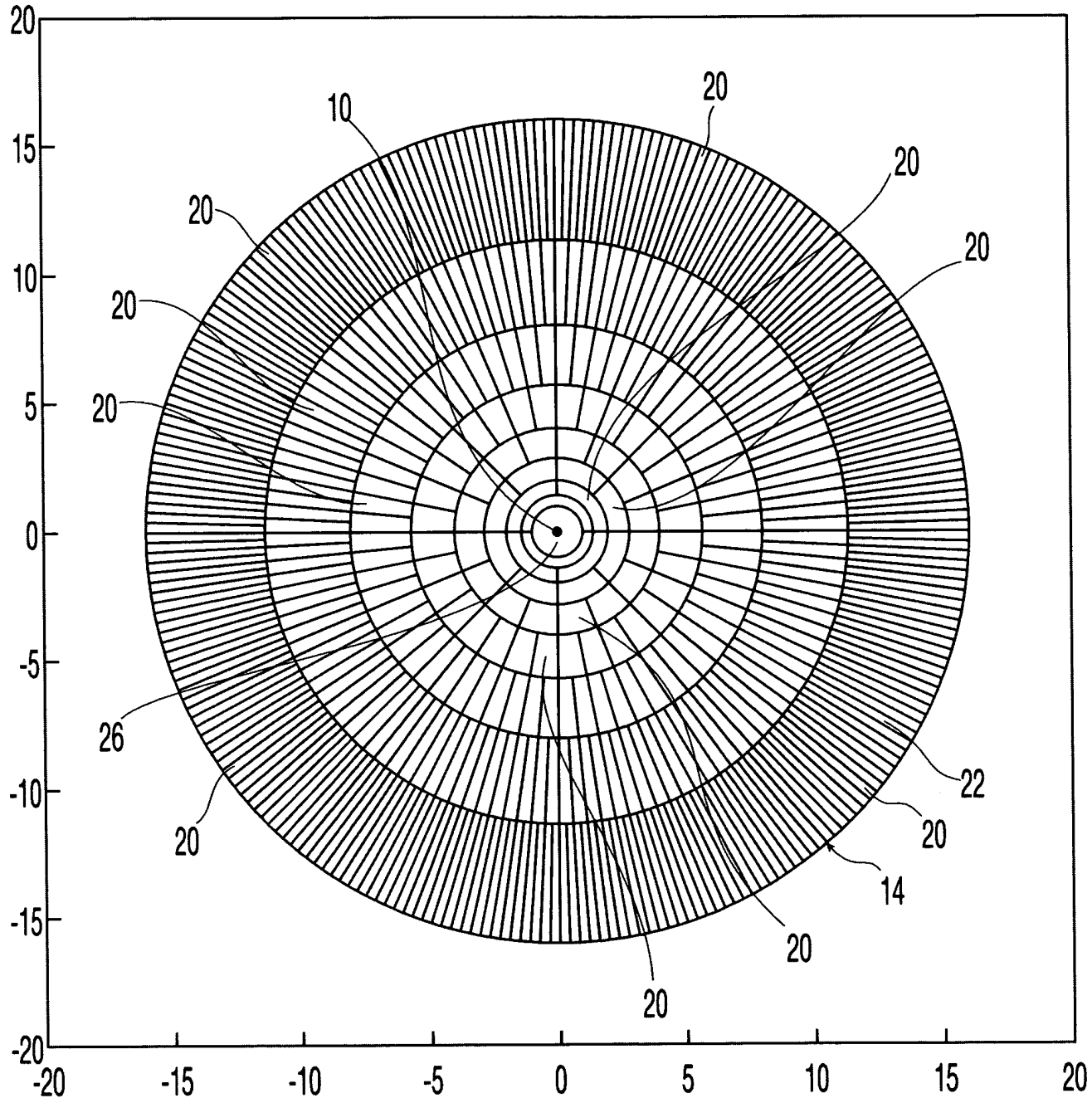
Fig. 4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-5
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26
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22
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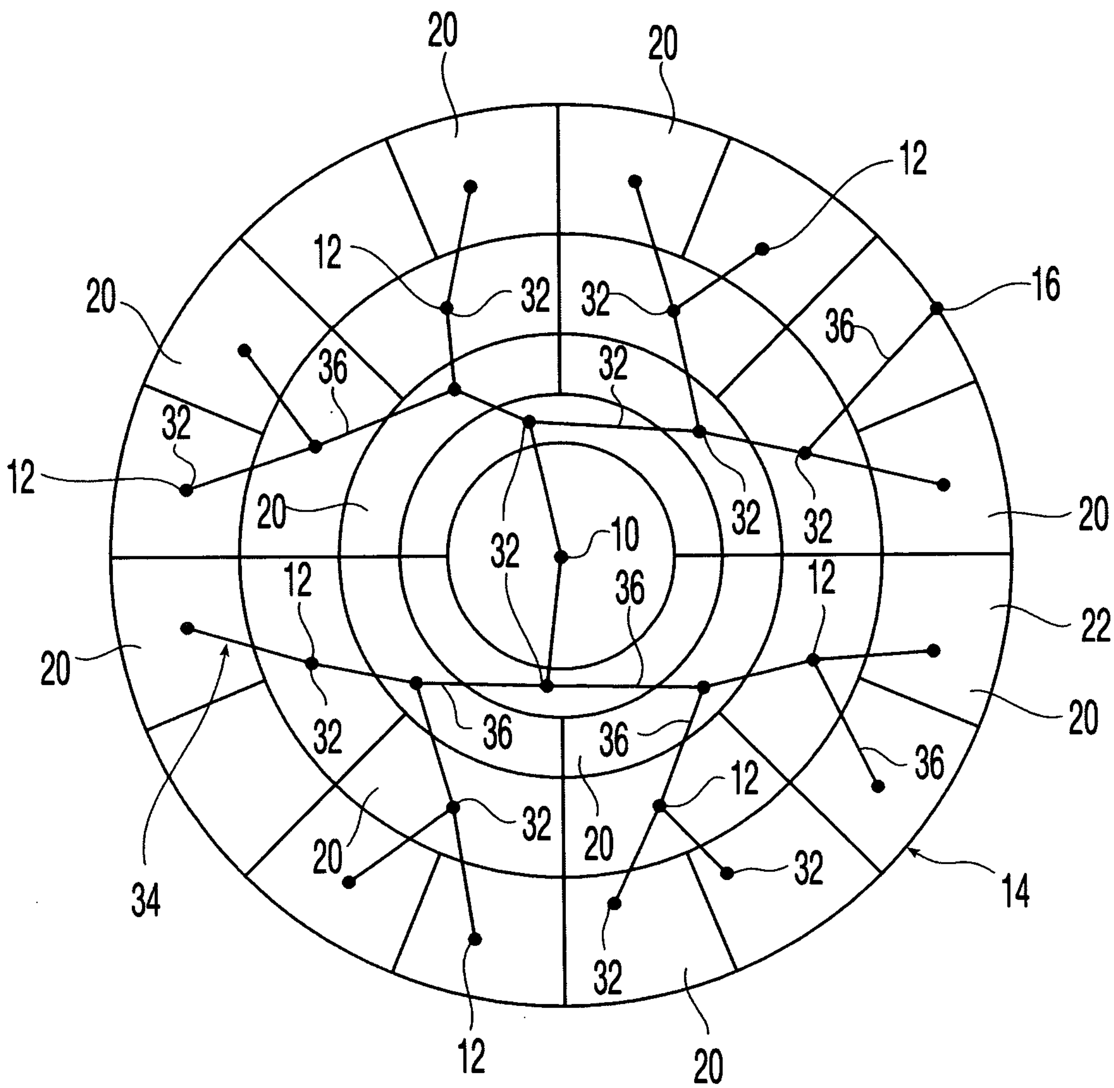
14
20
20

Fig. 5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36
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32
12
20

Fig. 6

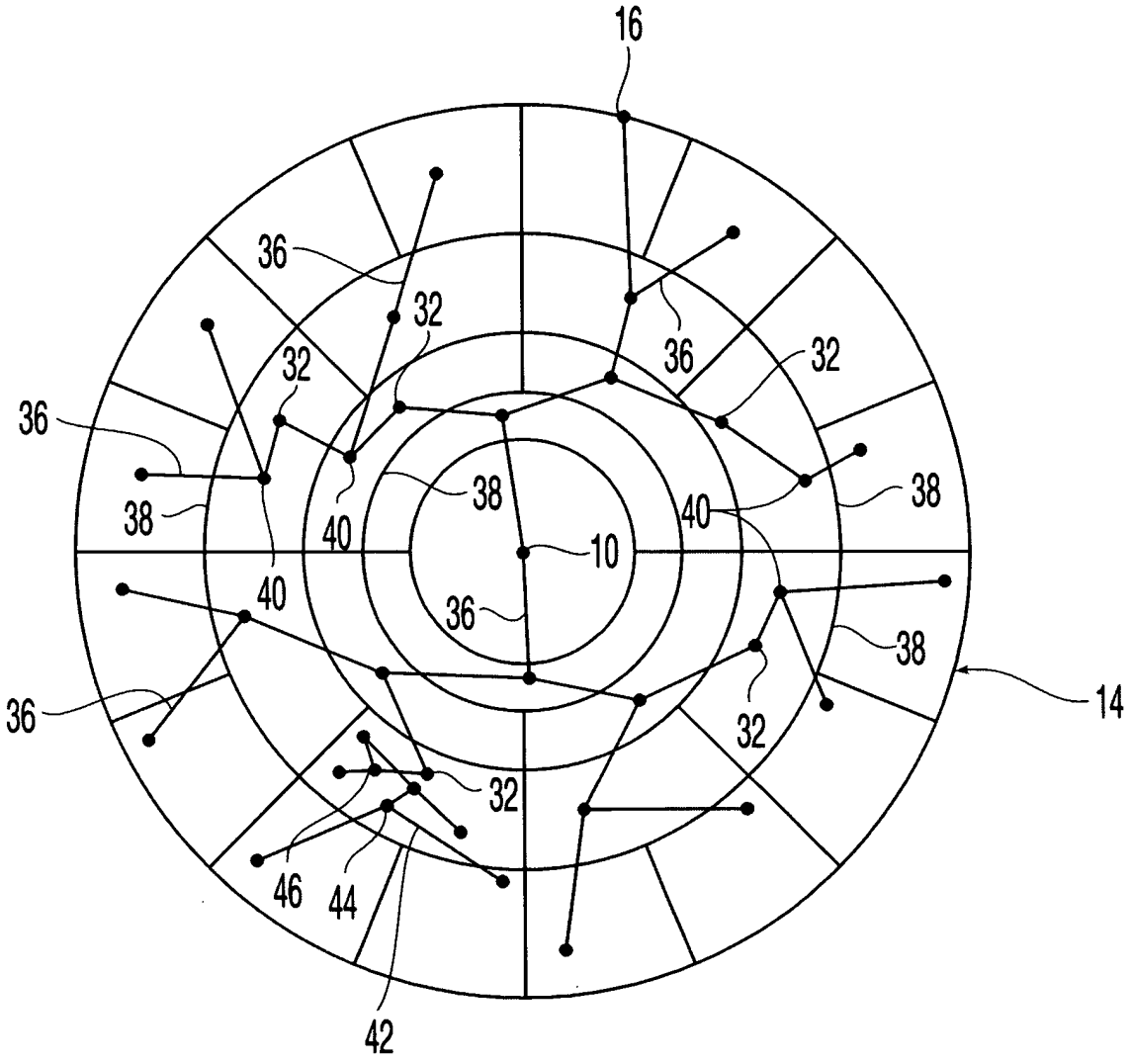

Fig. 7

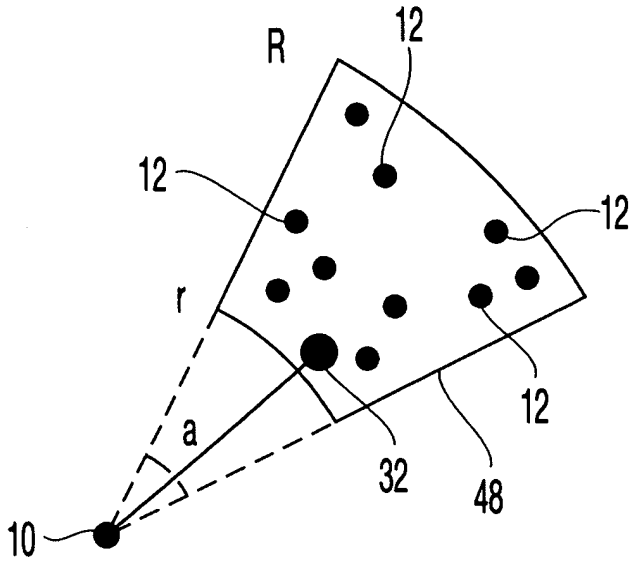

Fig. 8

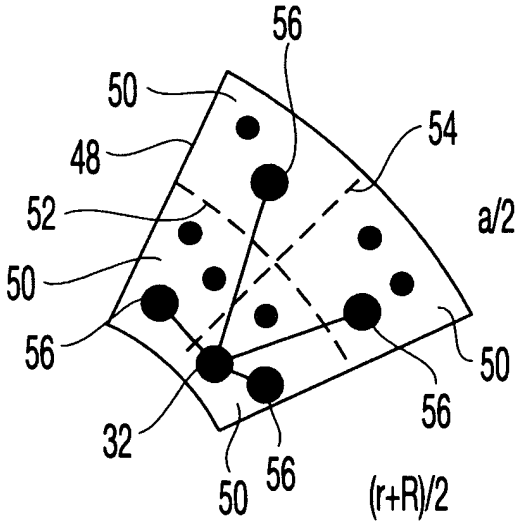

Fig. 9

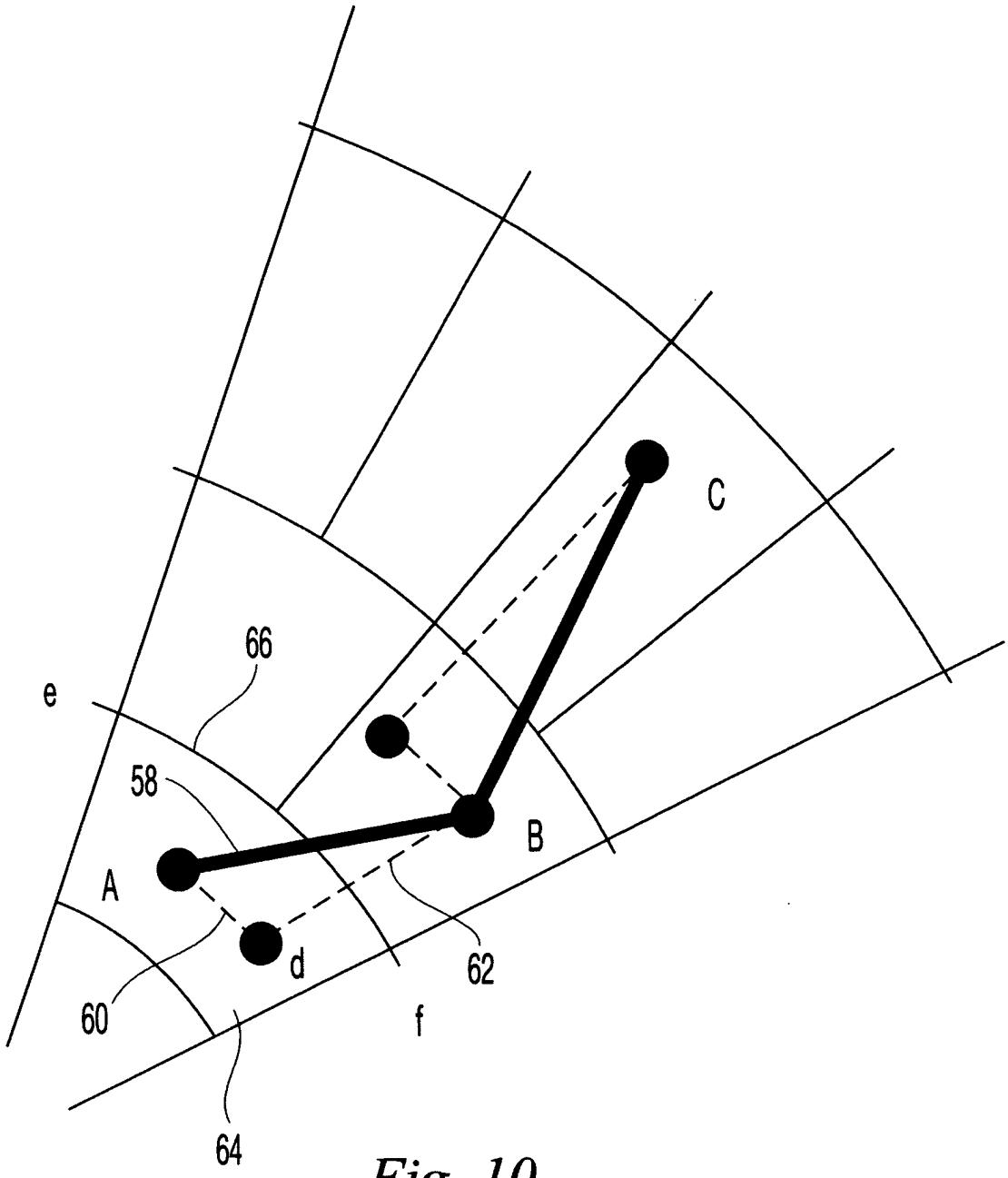

Fig. 10

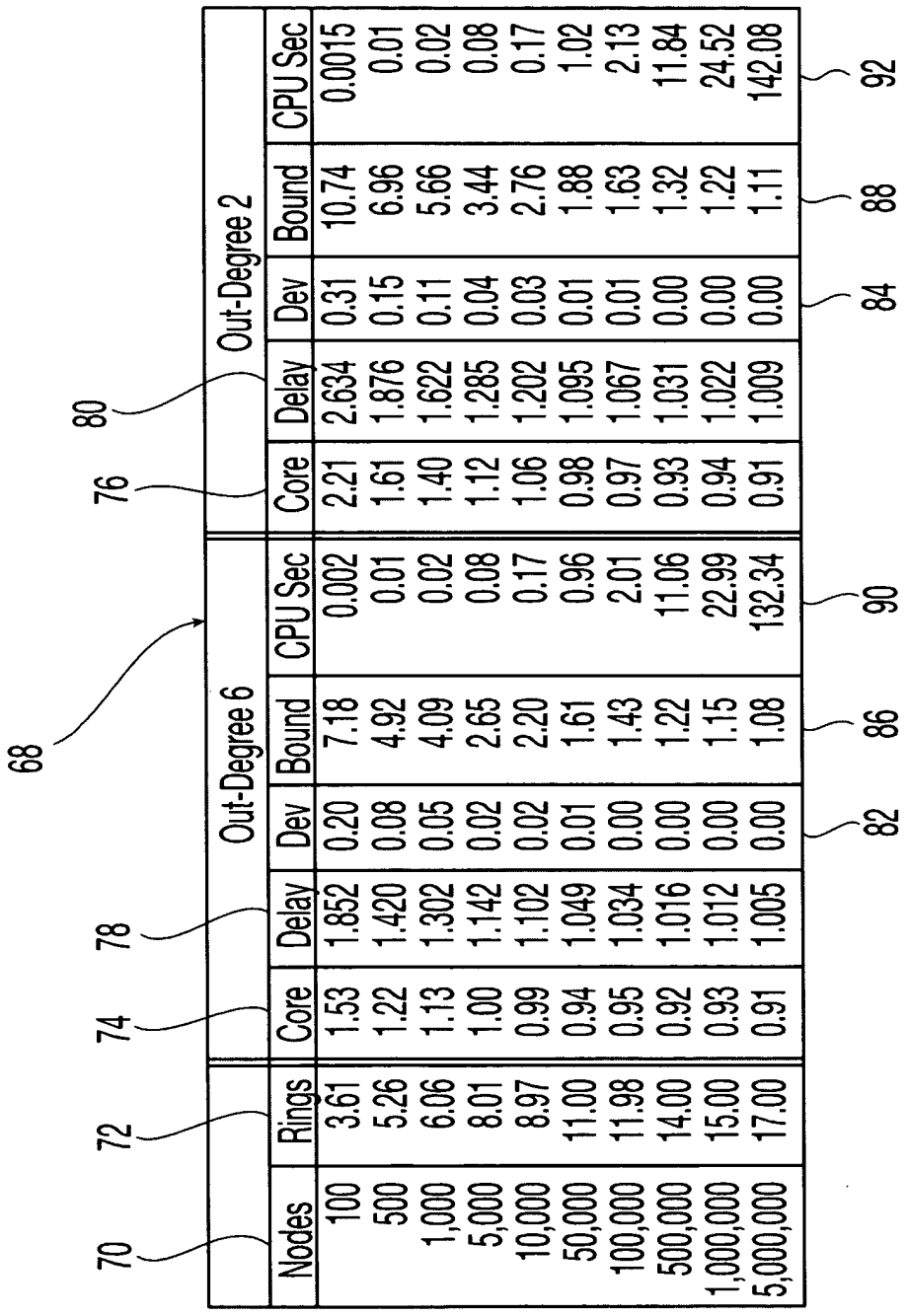
68
70
72
74
76
78
80
82
84
86
88
90
92
Out-Degree 6
Out-Degree 2
Nodes
Rings
Core
Delay
Dev
Bound
CPU Sec
Core
Delay
Dev
Bound
CPU Sec
100 3.61 1.53 1.852 0.20 7.18 0.002 2.21 2.634 0.31 10.74 0.0015
500 5.26 1.22 1.420 0.08 4.92 0.01 1.61 1.876 0.15 6.96 0.01
1,000 6.06 1.13 1.302 0.05 4.09 0.02 1.40 1.622 0.11 5.66 0.02
5,000 8.01 1.00 1.142 0.02 2.65 0.08 1.12 1.285 0.04 3.44 0.08
10,000 8.97 0.99 1.102 0.02 2.20 0.17 1.06 1.202 0.03 2.76 0.17
50,000 11.00 0.94 1.049 0.01 1.61 0.96 0.98 1.095 0.01 1.88 1.02
100,000 11.98 0.95 1.034 0.00 1.43 2.01 0.97 1.067 0.01 1.63 2.13
500,000 14.00 0.92 1.016 0.00 1.22 11.06 0.93 1.031 0.00 1.32 11.84
1,000,000 15.00 0.93 1.012 0.00 1.15 22.99 0.94 1.022 0.00 1.22 24.52
5,000,000 17.00 0.91 1.005 0.00 1.08 132.34 0.91 1.009 0.00 1.11 142.08

Fig. 11

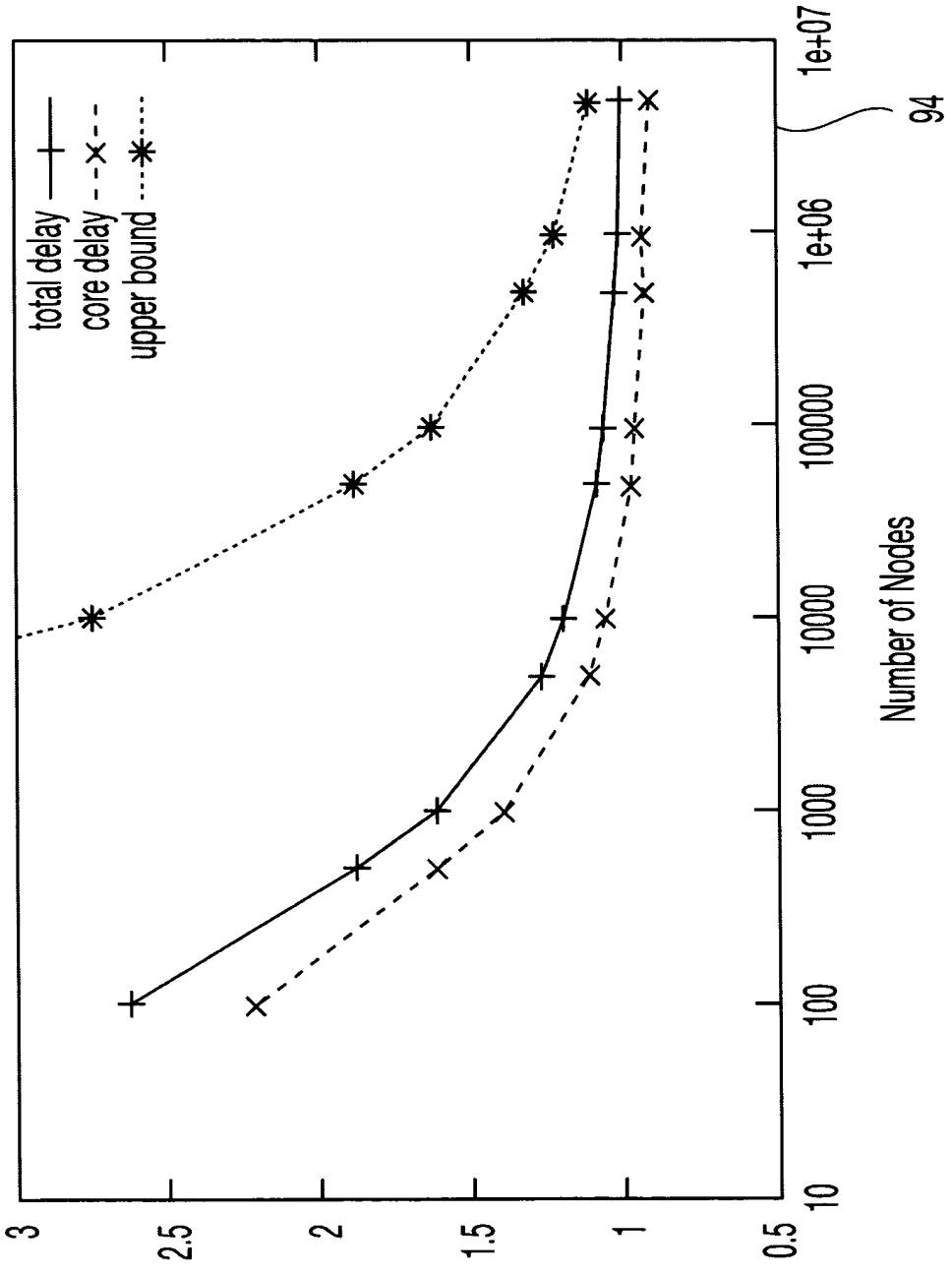
total delay
core delay
upper bound
3
2.5
2
1.5
1
0.5
10
100
1000
10000
100000
1e+06
1e+07
Number of Nodes
94

Fig. 12

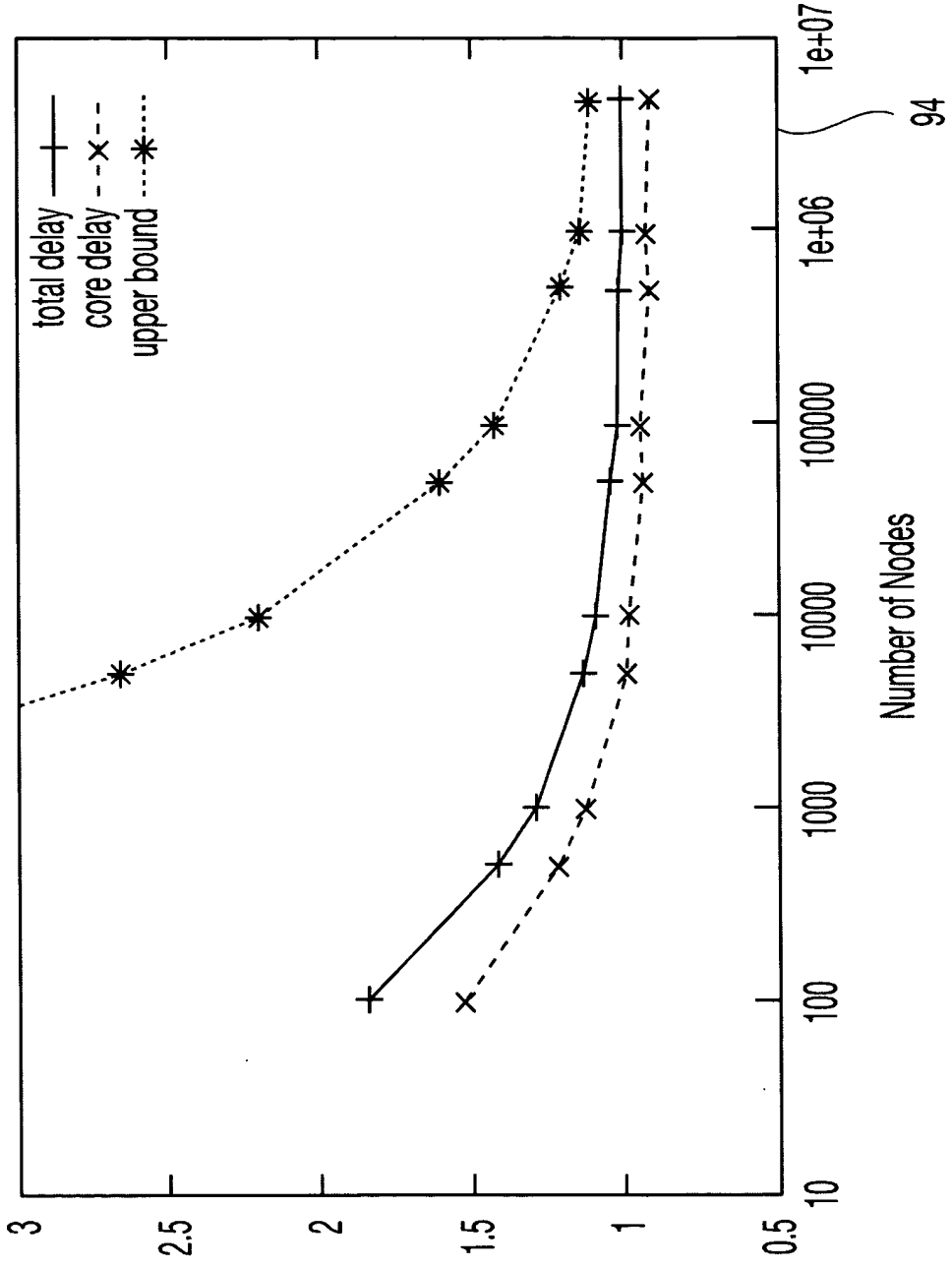
total delay
core delay
upper bound
3
2.5
2
1.5
1
0.5
10
100
1000
10000
100000
1e+06
1e+07
Number of Nodes
94

Fig. 13

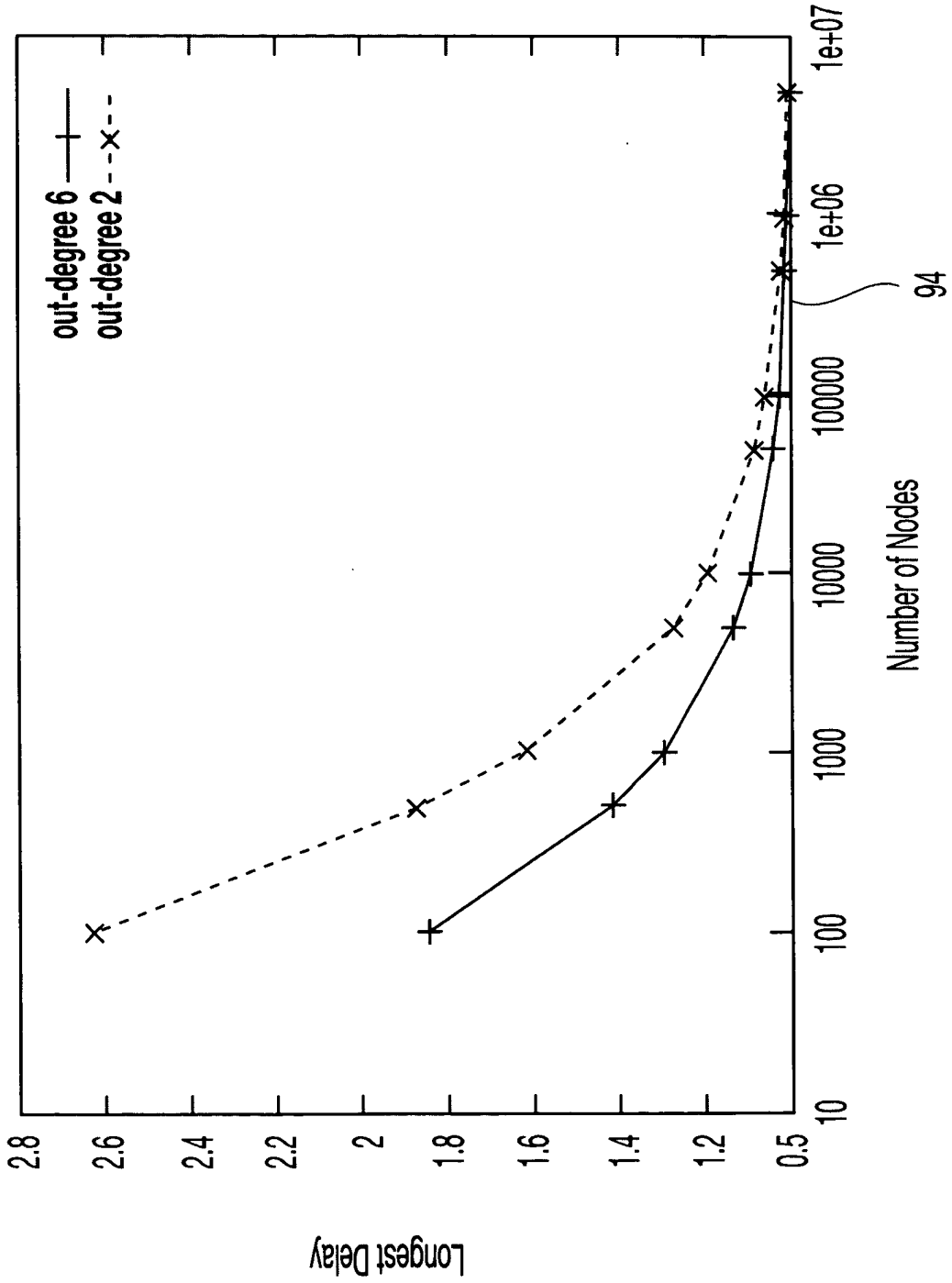
out-degree 6
out-degree 2
Longest Delay
Number of Nodes
94
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
0.5
10
100
1000
10000
100000
1e+06
1e+07

Fig. 14

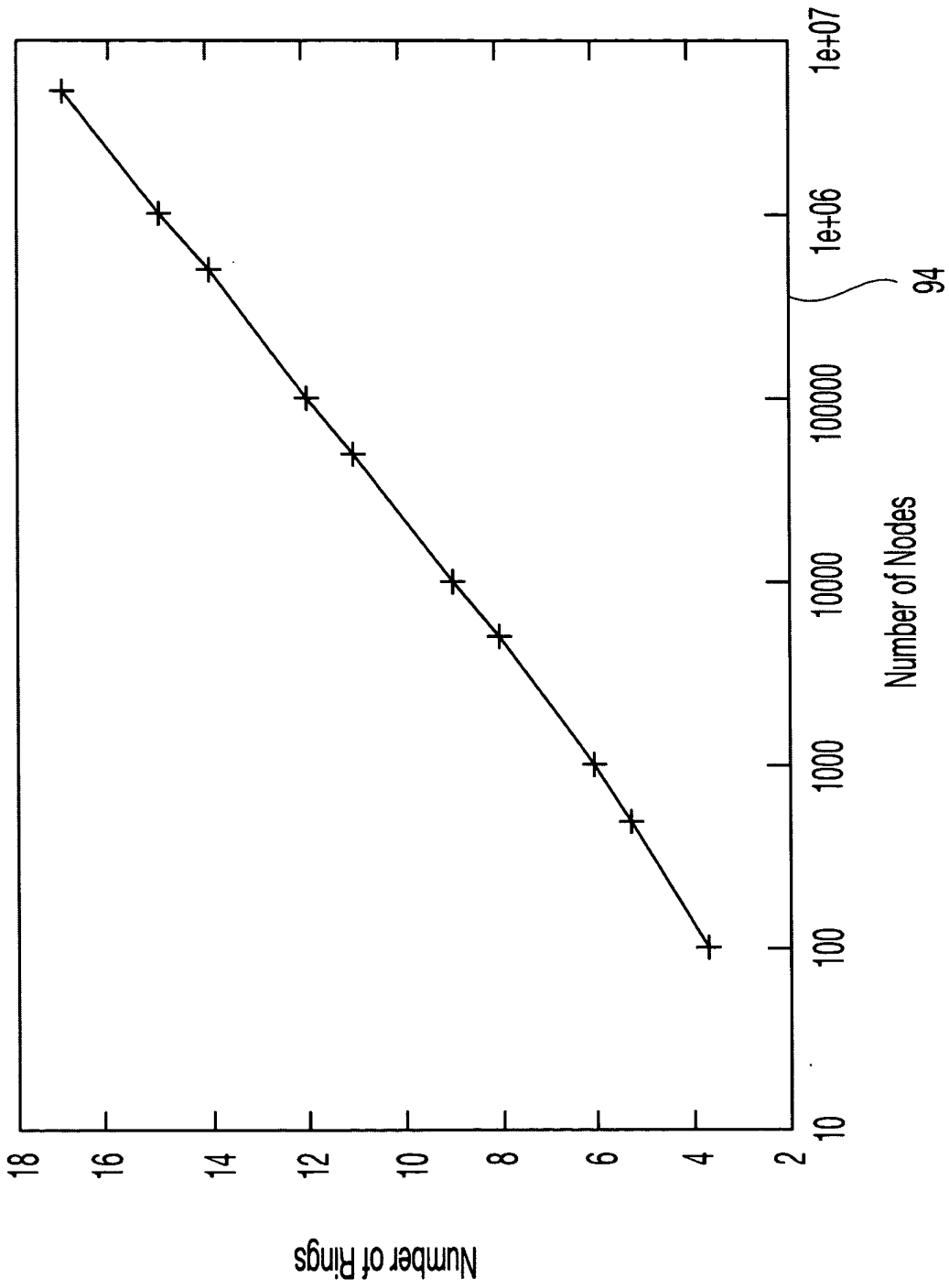
Number of Rings
18
16
14
12
10
8
6
4
2
10
100
1000
10000
100000
1e+06
1e+07
Number of Nodes
94

Fig. 15

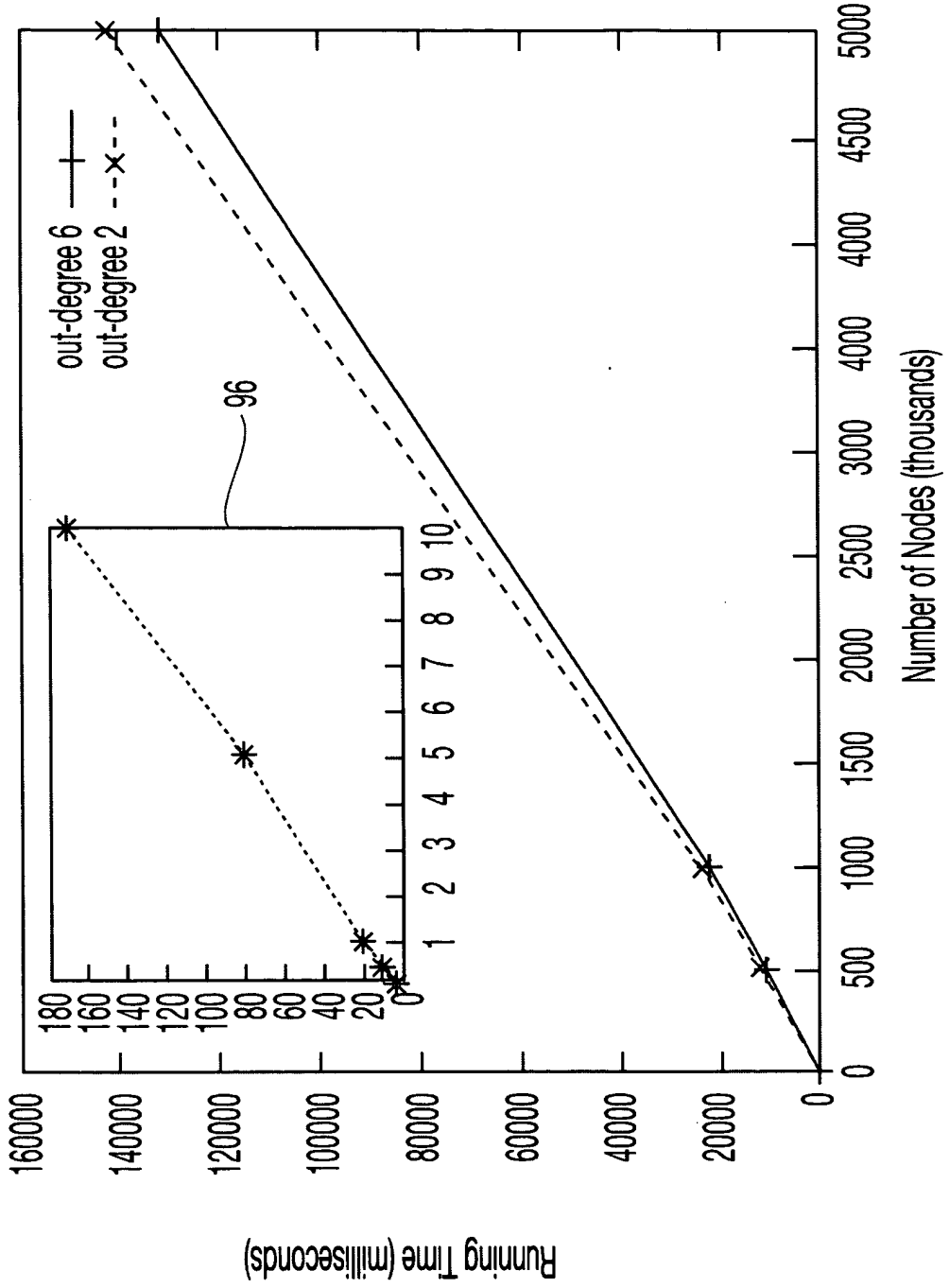
Running Time (milliseconds)
160000
140000
120000
100000
80000
60000
40000
20000
0
0
500
1000
1500
2000
2500
3000
4000
4000
4500
5000
Number of Nodes (thousands)
out-degree 6
out-degree 2
96
180
160
140
120
100
80
60
40
20
0
1
2
3
4
5
6
7
8
9
10

Fig. 16

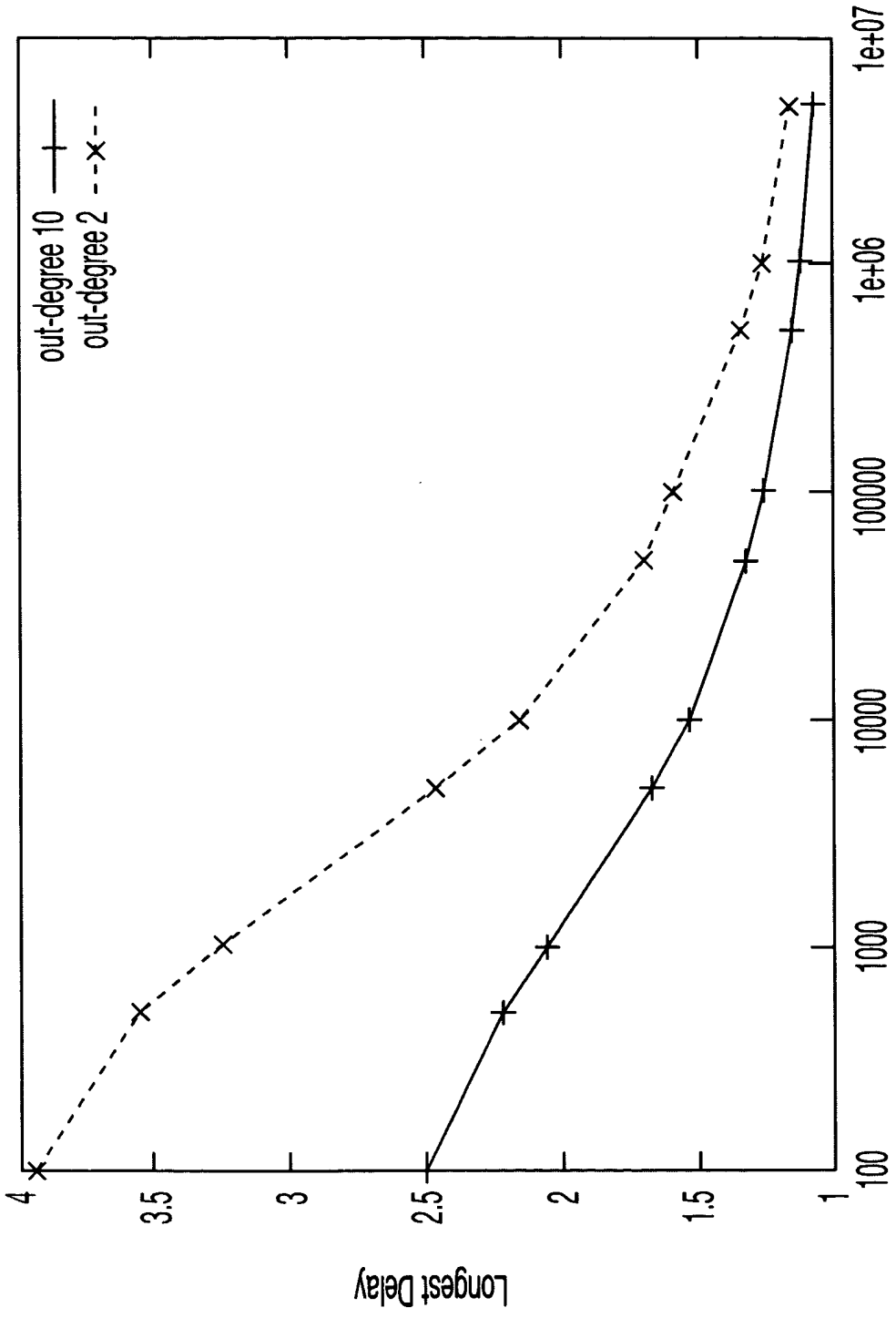
out-degree 10
out-degree 2
Longest Delay
Number of Nodes
4
3.5
3
2.5
2
1.5
1
100
1000
10000
100000
1e+06
1e+07

Fig. 17